SIRTF - THE SPACE INFRARED TELESCOPE FACILITY
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SIRTF - the Space Infrared Telescope Facility - is a cryogenically-cooled observatory for infrared astronomy from space which is being readied for launch by NASA in December, 2001. SIRTF will both complete NASA's family of Great Observatories and serve as a scientific and technical cornerstone of NASA's Origins program. SIRTF will combine the intrinsic sensitivity of a cryogenic observatory in space with the imaging and spectroscopic power of modern infrared detector arrays. SIRTF's principal features include: a) three instruments providing imaging and photometry from 3.5 to 160um and spectroscopy from 5-100um; b) an all-Beryllium telescope which has an 85-cm primary mirror with a measured surface error of .07um; c) an estimated cryogenic lifetime of 5 yr, achieved by the use of a novel cryogenic system architecture in which the telescope is launched warm and cooled down on orbit; d) an earth-trailing heliocentric orbit which provides the benign thermal environment required by the warm-launch architecture. The opportunities and schedule for the scientific utilization of SIRTF will also be described, as over 75% of the observing time on SIRTF will be awarded by peer review to the investigators from throughout the international scientific community. Please see http://sirtf.caltech.edu/ for updates on the status and schedule for SIRTF. This work was carried out at the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.